

I claim:

1. A fitting for connecting a cable having an electrically conductive member to another electrically conductive member, said fitting comprising:

5                   a sleeve member of a continuous cylindrical configuration sized for insertion of an end of said cable therein; and

                  a cylindrical crimping member having at least one inner tapered annular surface portion dimensioned to advance over said sleeve member, said inner tapered annular surface portion disposed in close-fitting engagement with said sleeve member whereupon axial advancement of said crimping member along said sleeve member will  
10                   impart inward radial deformation to said sleeve member into sealed engagement with an external surface portion of said cable.  
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2. A fitting according to claim 1 wherein said sleeve member includes an outer rearwardly tapered wall portion substantially complementary to said inner tapered annular surface portion.  
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3. A fitting according to claim 1  
wherein said sleeve member and said crimping  
member include releasable locking means  
therebetween for releasably mounting said crimping  
5 member on an external surface of said sleeve  
member.

4. A fitting according to claim 3  
wherein said releasable locking means includes a  
first locking member projecting radially inwardly  
from said inner tapered annular surface portion  
5 and a second locking member projecting radially  
inwardly from an external wall surface of said  
sleeve member.

5. A fitting according to claim 1  
wherein said crimping member has at least two  
inner tapered annular surface portions of  
progressively increasing angles rearwardly from  
5 said leading end of said crimping member.

6. A fitting according to claim 1  
wherein said sleeve member has an entrance end for  
insertion of said end of said cable and an  
external wall surface diverging rearwardly away  
5 from said entrance end for a distance

corresponding to the length of said inner tapered annular surface portion.

7. A fitting according to claim 4 wherein said second locking member is defined by an external shoulder on said sleeve member.

8. A fitting according to claim 7 wherein said sleeve member converges rearwardly from said external shoulder and is provided with axially spaced, annular sealing ribs on its inner surface.

9. A fitting according to claim 1 wherein said first locking member is defined by a circular rib composed of a material of limited resiliency which will compress as it advances along said outer sleeve member and will expand after it clears said external shoulder.

10. A fitting according to claim 5 wherein said crimping member includes a third inner tapered annular surface portion diverging rearwardly from one of said at least two inner tapered annular surface portions.

11. A fitting according to claim 8 wherein said inner tapered annular surface portion tapers at an angle substantially complementary to the angle of convergency of said sleeve member.

12. A fitting for connecting a cable having an electrically conductive member to another electrically conductive member, said fitting comprising:

5                   a thin-walled sleeve member of a continuous cylindrical configuration sized for axial insertion of an end of said cable therein, said sleeve member provided with an external catch thereon; and

10                   a cylindrical crimping member having at least one inner tapered annular surface portion extending radially outwardly of said said sleeve member including a circular rib projecting radially inwardly from a leading end of said  
15           tapered annular surface portion whereupon axial advancement of said crimping member along said sleeve member said rib will undergo compression as it is advanced along said sleeve member then expand into engagement with said external catch  
20           and continued advancement of said crimping member will impart inward radial deformation to said

sleeve member into sealed engagement with an external surface portion of said cable.

5           13. A fitting according to claim 12 wherein said sleeve member has at least two inner tapered annular surface portions of progressively increasing taper rearwardly from said leading end of said crimping member.

5           14. A fitting according to claim 12 wherein said sleeve member has an entrance end for insertion of said end of said cable and an external wall surface diverging rearwardly away from said entrance end for a distance corresponding to the length of said inner tapered annular surface portion and terminating in aid catch.

          15. A fitting according to claim 14 wherein said catch is defined by an external shoulder on said sleeve member.

          16. A fitting according to claim 15 wherein said sleeve member tapers toward said entrance end from a point in proximity to said external shoulder.

17. A fitting according to claim 12 wherein said circular rib is composed of a material of limited resiliency which will compress as it advances along said outer sleeve member and will expand after it clears said external shoulder.

18. A fitting according to claim 13 wherein said crimping member includes a third inner tapered annular surface portion diverging rearwardly from one of said at least two inner tapered annular surface portions.

19. A connector for connecting a coaxial TV cable to a terminal wherein said cable has an outer resilient jacket, inner and outer spaced electrically conductive portions and wherein said connector has a fastener for connection to said terminal and a body provided with inner and outer concentric sleeve members with axially spaced sealing ribs on an inner surface of said outer sleeve member for insertion of said inner electrically conductive portion within said inner sleeve member and insertion of said outer electrically conductive portion between said inner sleeve member and said outer sleeve

member, the improvement comprising:

15           an annular crimping member having a  
first inner tapered annular surface portion at  
least as great as an outer diameter of said outer  
sleeve member and disposed in outer surrounding  
relation to said outer sleeve member and a second  
20   inner tapered annular surface portion converging  
rearwardly from said first inner tapered annular  
surface portion wherein slidable axial advancement  
of said crimping member with respect to said outer  
sleeve member will impart inward radial  
25   deformation to said outer sleeve member into  
sealed engagement with an external surface of said  
cable.

20. A connector according to claim 19  
wherein said crimping member has a circular rib  
projecting radially inwardly from said inner  
tapered annular surface portion.

21. A connector according to claim 19  
wherein said outer sleeve member has an external  
shoulder and an external tapered surface portion  
converging rearwardly from said external shoulder.

22. A connector according to claim 19

wherein said first inner tapered annular surface portion extends from a first diameter as least as great as an outer diameter of said outer sleeve member to a second diameter less than said outer diameter of said outer sleeve member.

23. A connector according to claim 22 wherein said second inner tapered annular surface portion converges rearwardly from said first inner tapered annular surface portion.

24. A connector according to claim 22 wherein said second inner tapered annular surface portion converges at a progressively increased angle with respect to said first inner tapered annular surface portion.

25. A connector according to claim 19 wherein said crimping member includes a third inner tapered annular surface portion diverging rearwardly from said second inner tapered annular surface portion.

26. A multi-stage connector for mechanically and electrically connecting a cable having a first electrically conductive member to a



second electrically conductive member, said  
5 connector comprising:  
a connector body;  
an outer sleeve member extending from an  
end of said connector body for insertion of an end  
of said cable therein;  
10 a first crimping member having a first  
inner annular tapered surface portion including a  
first inner diameter at least as great as an outer  
diameter of said outer sleeve member and disposed  
in outer surrounding relation to said outer  
15 member; and  
a second crimping member having a second  
inner tapered annular portion at least partially  
overlying said first crimping member wherein  
slidable axial advancement of said second crimping  
20 member and said first crimping member with respect  
to said outer sleeve member will impart inward  
radial deformation to said outer sleeve member  
into sealed engagement with an external surface of  
said cable.

27. A connector according to claim 26  
wherein said inner tapered annular portion  
extending from a first diameter at least as great  
as an outer diameter of said outer sleeve member

5 to a second diameter less than said outer diameter  
of said outer sleeve member.

28. A connector according to claim 26  
wherein said first tapered inner annular surface  
portion extends from said first diameter to a  
second diameter less than said outer diameter of  
5 said outer sleeve member but greater than an inner  
diameter of said outer sleeve member.

29. A connector according to claim 26  
wherein said first crimping member includes an  
external shoulder at a leading end thereof.

30. A connector according to claim 29  
wherein said second crimping member includes a  
leading end portion moveable into abutting  
relation to said shoulder in response to axial  
5 slidable advancement of said crimping member with  
respect to said crimping member.

31. A connector according to claim 26  
wherein said first crimping member and said outer  
sleeve member have releasable connecting means  
there between whereby to releasably connect a  
leading

5           end portion of said first crimping member to a  
trailing end portion of said outer sleeve member.

32. A connector according to claim 26  
wherein said first and second crimping members  
undergo successive axial advancement in the same  
direction with respect to said outer sleeve  
5       member.

33. In a connector for connecting a  
coaxial TV cable to a terminal wherein said cable  
has an outer resilient jacket, inner and outer  
spaced electrically conductive portions and  
5       wherein said connector has a fastener for  
connection to said terminal and a body provided  
with inner and outer concentric sleeve members  
with axially spaced sealing ribs on an inner  
surface of said outer sleeve member for insertion  
10      of said inner electrically conductive portion  
within said inner sleeve member and insertion of  
said outer electrically conductive portion and  
said jacket between said inner sleeve members and  
said outer sleeve member, the improvement  
15      comprising:

          a first crimping member having a  
first inner tapered annular portion including a

first inner diameter at least as great as an outer  
diameter of said outer sleeve and a leading end  
20 portion disposed in outer surrounding relation to  
a trailing end portion of said outer sleeve  
member; and

a second crimping member having a  
second inner tapered annular portion extending  
25 rearwardly from a first diameter at least as great  
as an outer diameter of said first crimping member  
to a second diameter less than said outer diameter  
of said first crimping member but greater than  
said inner diameter of said outer sleeve member  
30 wherein slidable axial advancement of said second  
crimping member and said first crimping member  
with respect to said outer sleeve member will  
impart controlled inward radial deformation to  
said first crimping member and resultant inward  
35 radial deformation of said sealing ribs into sealed  
engagement with said outer resilient jacket.

34. In a connector according to claim  
33 wherein said first crimping member includes an  
external shoulder portion at a leading end  
thereof, and said second crimping member includes  
5 a leading end portion movable into abutting  
relation to said external shoulder portion when

said second crimping member is axially advanced  
with respect to said first crimping member.

35. In a connector according to claim  
34 wherein said first crimping member and said  
outer sleeve member have first releasable  
connecting means therebetween for releasably  
5 connecting said first crimping member to an outer  
surface of said outer sleeve member.

36. In a connector according to claim  
34 wherein said first and second crimping members  
have second releasable connecting means  
therebetween for connecting a leading end portion  
5 of said second crimping member to a trailing end  
portion of said first crimping member.